

Abstract of the Disclosure

The present invention relates to a variable clamp equalization method and apparatus, the method includes measuring optical signal to noise ratio (OSNR) values for each wavelength, computing a raw power adjustment value for each wavelength, computing a raw power adjustment correction factor for each computed raw power adjustment value based on a computed OSNR range value in accordance with a pre-defined variable clamp value schedule, wherein a larger clamp is scheduled for use when the computed OSNR range value is larger, and a smaller clamp is scheduled for use when the computed OSNR range value is smaller. The method further includes determining a clamped power adjustment value for each wavelength, applying the corresponding determined clamped power adjustment value to each wavelength, and iterating the aforementioned until the computed OSNR range value is within pre-defined boundaries, whereby the signal is considered equalized.